Confirmation No. 2076

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Niedzwiecki et al. Examiner Karie Amber Oneill

Serial No. 10/644,614 Group Art Unit 1746

Filed: August 19, 2003 Docket No. 70278.020100

Title: TRANSPORTABLE SOLID OXIDE FUEL CELL GENERATOR

DECLARATION OF INVENTORS OF PRIOR INVENTION IN THE UNITED STATES UNDER 37 C.F.R. § 1.131

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

As the below-named inventors, we do hereby declare as follows:

- 1. This declaration establishes conception and diligence toward the reduction to practice of the invention(s) claimed in this application in the United States, prior to January 10, 2003.
- 2. All of the documents provided as exhibits to this declaration were created in the United States and/or memorialize events that took place in the United States.
 - 3. We are the named inventors in the above-identified patent application.
- 4. Before January 10, 2003, we developed a transportable electrical generator powered by a fuel cell system. The name that we used to refer to the system was "Hyhauler."
- 5. A Power Point presentation was given at the 14th World Hydrogen Energy Conference delineating the features and operation of our transportable electrical generator prior to January 10, 2003. This presentation bears the authenticated date of 2002. A copy of this presentation is attached as Exhibit A.

- 6. This 2002 presentation discloses that key aspects of our invention were conceived well before January 10, 2003. For example, this presentation illustrates hydrogen storage for fuel cell vehicles. The presentation illustrates a trailer for storage and delivery of the hydrogen. Additionally, the presentation discloses the Tri-Pac storage tank system for fuel storage, delivery and systems integration.
- A schematic drawing stored in a computer file entitled "Hyhauler EM System, Rev 1.0," last modified in 2002, illustrates the features and operation of the transportable electrical generator prior to January 10, 2003 and is provided in Exhibit B. The schematic is similar to Figure 3 in the subject application and illustrates a hydrogen storage subsystem to charge or refill the internal hydrogen storage tanks mounted in the Hyhauler. A fuel cell stack is disclosed to generate electricity. Additionally, a hydrogen supply means and an oxygen supply means is illustrated. A system controller monitors and regulates flows within the system to establish proper electrical output. The electrical output is conditioned by a conventional electrical power conditioning unit, not shown in the Exhibit B. This system was to be and is transportable as depicted in the presentation in Exhibit A.
- 8. The date of the schematic drawing in Exhibit B is evidenced in a computer archive listing image and Microsoft Office files maintained on the personal computer of Neel Sirosh. The integrity of those files has been maintained since the file modification dates associated with those files. A printed copy of the content of the directory where the computer files reside is provided in Exhibit C.
- 9. Exhibit D is a copy of Neel Sirosh's 2002 lab notebook page 129. This page 129 includes the following entry:

HyHauler w/ Fuel Cell

Hydrogen storage or other gas/fuel storage on mobile platform and fuel cell for powering. SOFC or PEM possible. Needs balance of plant and controls (Patent?) thermal management, power conditioning for DC-AC conversion. DC inverter from /Xantrex/.

- 10. Also at the bottom of page 129 is a block diagram of a portable electrical power generator powered by hydrogen supplied to a fuel cell stack producing DC power and including a Power conditioner producing an AC power output.
- 11. Exhibit E is a page from a pre 2003 brochure from Neel Sirosh's 2002 files that shows typical usage of Xantrex inverter/charges. The inverter converts the DC output to AC power, similar to that required in the HyHauler EM.
- 12. All activities above described related to development of the claimed invention took place prior to January 10, 2003 and took place within the United States of America or in a NAFTA country or WTO member country.
- 13. Together we continuously worked to perfect the portable fuel cell generator system from at least prior to the date of Exhibits A, B, C, D, and E until the filing date of the instant patent application constituting constructive reduction to practice of the claimed invention.

We declare under penalty of perjury under the laws of the State of California that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Executed this 8 day of NOOEMBB2, 2006, at ILLUINE, California.

Executed this _	8	_ day of _	November, 2006, at /RVNG, California.
			$\mathcal{M}_{}$
			Neel Sirosh
Executed this _	ક	_ day of _	Novens oた, 2006, at <u> たい</u> いら , California.
			Andris R. Abele